

female effort. However, in species that exhibit reversed sexual dimorphism (RSD), smaller males may forage more efficiently and, therefore, male parental effort might be greater than that of females. We sought to examine the parental behavior of a species exhibiting RSD, the eastern screech-owl (*Otus asio*). The behavior of male and female screech-owls was studied during the breeding seasons of 1992 and 1993. Observations were made using camcorders placed inside specially constructed nest boxes. Preliminary analyses suggest that (1) females feed young more frequently than males, (2) feeding rates remain constant throughout the nestling period, and (3) males and females feed young similar prey (mainly invertebrates). The relevance of our results to the evolution of RSD, plus other aspects of parental and nestling behavior, will be discussed.

A MODIFIED POWER SNARE TO CATCH BREEDING GOLDEN EAGLES (*AQUILA CHRYSAETOS*)

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A radiotelemetry study of the ranging behavior of golden eagles (*Aquila chrysaetos*) in Scotland demanded that territorial breeding birds be caught so that backpack transmitters could be fitted. Since the population of golden eagles is not migratory in Scotland, efforts were made to trap the eagles at all times of the year. Although some success was had during the winter, successes were not predictable, and a method for trapping the eagle on the nest in the summer was devised. Adult golden eagles are difficult to catch during the breeding season, particularly when the use of live lures is not permitted. We describe a method for trapping breeding golden eagles which does not use lure animals to attract the target birds. Instead, the desire of adults to return to feed their offspring is the motivation which brings them within the trapping area. Essentially a modification of a trap described by Hertog, our trap with its modifications has proved to be a safe, sure, and inexpensive method for catching eagles at the nest.

USING SATELLITE TELEMETRY TO MONITOR MOVEMENTS OF GYRFALCONS IN NORTHERN ALASKA AND THE RUSSIAN FAR EAST

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Gyrfalcons (*Falco rusticolus*) are commonly found nesting in northern and western Alaska. However, little information is available on juvenile dispersal and wintering areas of the species in Alaska. In July 1992 we marked

two juvenile female gyrfalcons with 45 g satellite transmitters using backpack harnesses at an eyrie on the central Seward Peninsula, Alaska. From August 1992 to January 1993 we monitored the movements of the gyrfalcons using the ARGOS polar orbiting satellite system. One gyrfalcon left its natal area approximately 4 wk after fledging. It was located near the Anadyr River in eastern Siberia in mid-September and moved to southwestern Alaska (Kodiak Island) in early October. The second gyrfalcon remained near its natal area until mid-September, then moved south along the western coast of Alaska and was last located in December on northern Nunivak Island in western Alaska. In July 1993 we marked seven juvenile gyrfalcons with 28 g satellite transmitters using backpack harnesses at three eyries on the central Seward Peninsula, Alaska. We are currently monitoring these gyrfalcons using the ARGOS polar orbiting satellite system. Our results demonstrate that satellite telemetry is a valuable tool for monitoring broad-scale movements of gyrfalcons and other avian species, capable of carrying the transmitter, in remote areas. As satellite transmitters continue to decrease in size and weight, satellite telemetry will become an important research tool for examining movements of an increasing number of avian species.

SATELLITE TRACKING OF EAGLES

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Many species of eagles spend more than half of the year away from their breeding grounds on migration and in their wintering areas where they are difficult to study by conventional methods. This much needed knowledge is, however, an important prerequisite for their protection. Satellite telemetry is a new technique to study the movements, orientation and ecology during migration of large- and medium-sized birds on a worldwide basis which has been little-used so far. The short battery life, the weight and cost of transmitters as well as the difficulties in capturing adult and immature eagles are the most important limiting factors of this promising technique. In 1992 and 1993 we fitted satellite transmitters to juvenile, immature, and adult eagles of six species (*Haliaeetus albicilla*, *H. pelagicus*, *Aquila heliaca*, *A. nipalensis*, *A. pomarina* and *A. clanga*) in various parts of Eurasia. Up to eight transmitters were available per species. Some birds have been tracked for several thousand kilometres which will be discussed in detail. A new generation of solar-powered transmitters has become available in 1993 which gives some hope that the movements of at least large species could be studied in greater detail and for longer periods. Such a transmitter has been fitted to a juvenile sea eagle in July 1993 to study its dispersal, movements, and ecology after becoming independent from its parents.